O. H. STROM.

LUBRICATING SYSTEM.

APPLICATION FILED JULY 24, 1918. RENEWED JUNE 14, 1919.

1,318,932. Patented Oct. 14, 1919.

Fig. 1.

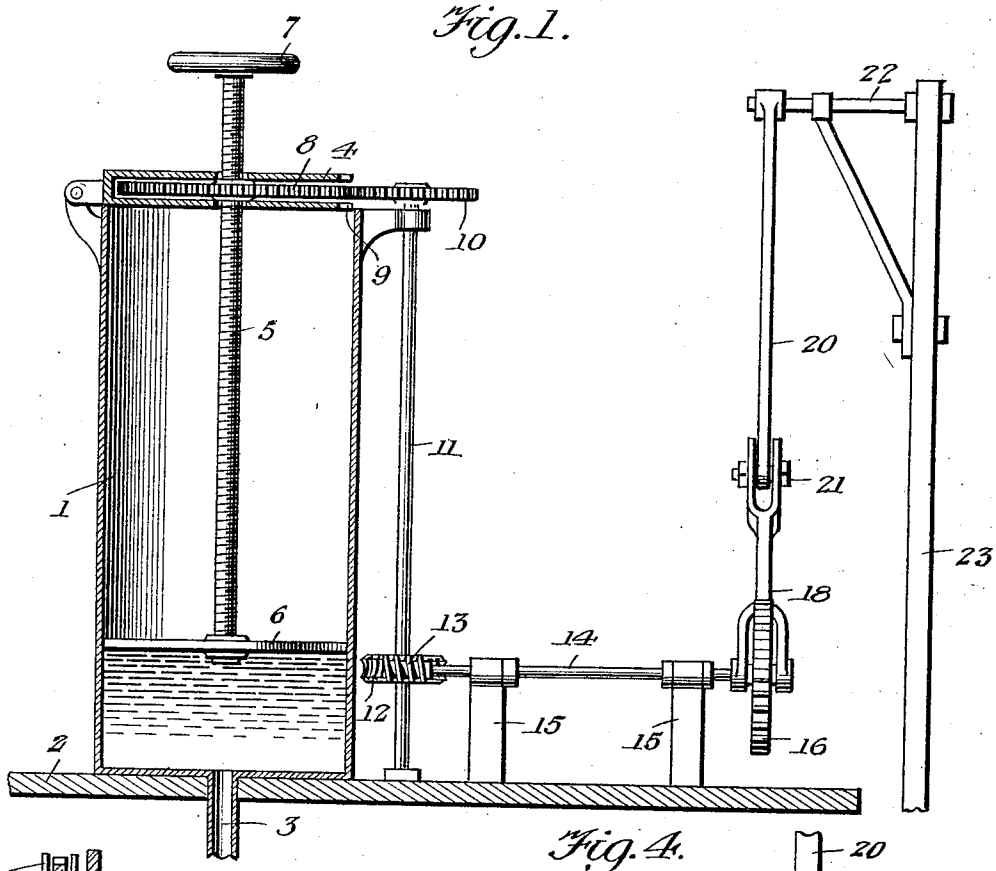


Fig. 4.

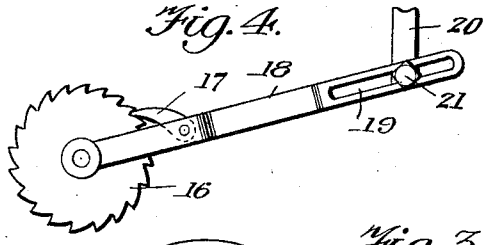


Fig. 2.

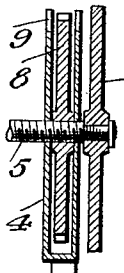
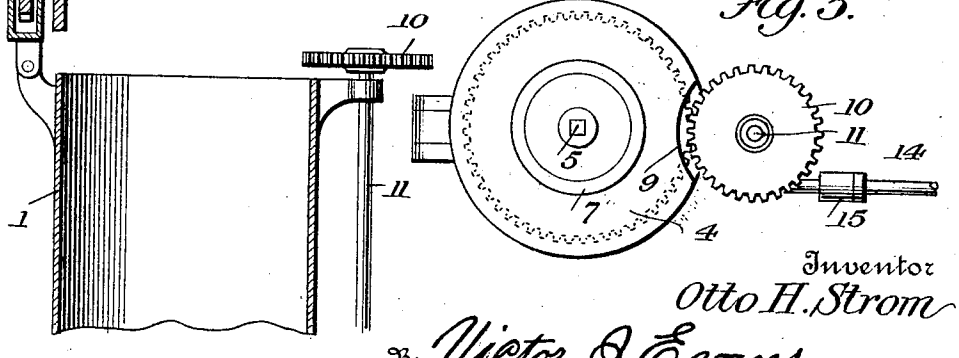


Fig. 3.



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LUBRICATING SYSTEM.

1,318,932. Specification of Letters Patent. Patented Oct. 14, 1919.

Application filed July 24, 1918, Serial No. 246,567. Renewed June 14, 1919. Serial No. 304,280.

To all whom it may concern:

Be it known that I, OTTO H. STROM, a citizen of the United States, residing at Hot Springs, in the county of Madison and State of North Carolina, have invented new and useful Improvements in Lubricating Systems, of which the following is a specification.

This invention relates to new and useful improvements in lubricating systems and the principal object of the invention is to provide automatic means for feeding the lubricant to the parts to be lubricated, such means being regulated by the speed of the machine.

Another object of the invention is to provide a device of this character which is simple and durable in construction, reliable and efficient in operation and one which can be manufactured and placed upon the market at a minimum cost.

The invention also consists in certain other features of construction and in the combination and arrangement of the several parts, to be hereinafter fully described, illustrated in the accompanying drawings and specifically pointed out in the appended claim.

In describing my invention in detail, reference will be had to the accompanying drawings wherein like characters denote like or corresponding parts throughout the several views, and in which:—

Figure 1 is a side view, with parts in section, of the invention.

Fig. 2 is a detail view showing the lid of the grease holder and operative parts therewith in open position.

Fig. 3 is an end view, and Fig. 4 is an enlarged detail view of the notched mechanism.

As shown in these views, the grease holder 1 is located on a suitable support 2 and its outlet 3 is connected by tubes or the like to the bearings to be lubricated. This holder is provided with a hinged cover 4 through which the screw threaded plunger rod 5 passes. 6 indicates the plunger suitably secured to said rod and 7 indicates a handle secured to the upper end of the rod. The lid 4 carries a large toothed wheel 8 which has a central screw threaded opening through which the plunger rod passes. I prefer to locate the wheel 8 in a recess formed in the cover. As shown, the upper edge of the cover is provided with a recess 9 which exposes a part of the wheel 8. 10 indicates a small toothed wheel meshing with the teeth on the wheel 8 and extending into said recess. This wheel 10 is mounted on the upper end of a shaft 11 extending parallel with the holder. This shaft is suitably supported and adjacent its lower end is provided with a worm wheel 12 which is engaged by a worm 13 on the end of the shaft 14, journaled in the brackets 15 projecting upwardly from the support 2. The other end of the shaft 14 carries a ratchet wheel 16 which is engaged by a pawl 17 pivoted to a lever 18 which has one end pivoted to the shaft 14. The other end of this lever is provided with a slot 19. 20 indicates a pitman rod having its lower end adjustably held in said slot by means of the clamp screw 21. The upper end of the pitman rod is pivoted to an arm 22 which is carried by a reciprocating rod 23 which is reciprocated by a cam or other means located on the machine to be lubricated.

It will thus be seen that as the rod 23 reciprocates it will cause the shaft 14 to be rotated at intervals so that the plunger in the holder will be forced downwardly step by step by means of the gears and shaft connected with the shaft 14. In this way the lubricant in the holder will be positively fed to the bearings. When the holder is empty the plunger may be raised by means of the handle 7 and then the lid or cover tilted and the holder refilled with lubricant.

It is thought from the foregoing description that the advantages and novel features of my invention will be readily apparent.

I desire it to be understood that I may make changes in the construction and in the combination and arrangement of the several parts, provided that such changes fall within the scope of the appended claim.

What I claim is:—

A lubricating device comprising a holder, a hinged cover therefor having a recess therein, a screw threaded plunger rod car-

ried by said cover, a plunger carried by said rod, a gear in said recess and having a screw threaded opening in engagement with the plunger rod, a shaft, a gear thereon meshing with the first mentioned gear, a worm wheel on said shaft, a second shaft, a worm thereon meshing with the worm wheel, a ratchet wheel on said shaft, a lever, a pawl thereon engaging the ratchet wheel, a reciprocating member, a pitman rod connected with said member and adjustable means connecting said rod with said lever.

In testimony whereof I affix my signature.

OTTO H. STROM.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."